



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,520	12/05/2003	Roy Hirst	MS305473.1/MSFTP491US	2369
27195 7590 02/08/2008 AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER RADTKE, MARK A	
			ART UNIT	PAPER NUMBER
			2165	
			NOTIFICATION DATE	DELIVERY MODE
			02/08/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket1@thepatentattorneys.com
hholmes@thepatentattorneys.com
osteuball@thepatentattorneys.com

Office Action Summary

Application No.

10/729,520

Applicant(s)

HIRST, ROY

Examiner

Mark A. X Radtke

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-8,10-12,14,15,18-24,26-30 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-8,10-12,14,15,18-24,26-30 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 31 October 2007 has been entered.

Remarks

2. In response to communications filed on 31 October 2007, claim(s) 2-4, 9, 13, 16 and 17 is/are cancelled and claim(s) 1, 7, 10, 14-15, 18, 23-24 and 32-33 is/are amended per Applicant's request. Therefore, claims 1, 6-8, 10-12, 14-15, 18-24, 26-30 and 32-34 are presently pending in the application, of which, claim(s) 1, 23, 24, 32 and 33 is/are presented in independent form.
3. Applicant's amendments have necessitated new grounds of rejection.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1, 6-8, 10-12, 14-15, 18-23 and 32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

6. Claims 1, 6-8, 10-12, 14-15, 18-23 and 32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material per se.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive

material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Within the context of the instant disclosure, the state of the art at the time the invention was made, and the language of the claims themselves, claims 1, 6-8, 10-12, 14-15 and 18-23 could reasonably be construed to consist of nothing more than a series of software modules. At lines 13-26 of page 6 of the instant specification, Applicant states that "components" may be "software", "a program", "an object", etc. Any one of these constructions would render the claimed invention as software *per se*, and thus non-statutory.

With respect to claim 32, the claim is directed to non-functional descriptive material recorded on a computer-readable medium. The claimed invention is simply a series of "fields" that lack function.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 23-24, 26-30 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadahiro (U.S. Pat. No. 6,237,136) in view of Hypadapter ("Hypadapter: An Adaptive Hypertext System for Exploratory Learning and Programming" by Hohl et al. Published 1996).

As to claim 33, Sadahiro teaches a computer implemented method for finding technical documentation (see Abstract), the method comprising:

receiving a first query string from a user, the query string comprising terminology of a first vocabulary corresponding to a first programming language (see figure 6, step 402 and see figure 2, element 202 and see column 2, lines 43-48);

mapping the first vocabulary to a second vocabulary that corresponds to a second programming language (see figure 6, step 408 and see figure 2, element 204 and see column 3, lines 1-7);

generating a second query string in terminology of the second vocabulary by employing the second vocabulary and the first query string, the second query string semantically corresponds to the first query string (see column 3, lines 12-19).

Sadahiro does not explicitly teach
searching a document set for articles relevant to the second query;
providing articles found by the search to the user;
determining an importance value for a retrieved technical document via
monitoring at least one of visible technical documentation, search engine activity, and
network traffic activity; and

further monitoring at least one of a counter, a type of word or phrase employed in
a search, an implied or inferred measurement of data activity and an explicit request
from users regarding a data source's technical value, ranking or merit.

Hypadapter teaches a computer implemented method for finding technical
documentation (see Abstract), the method comprising:

searching a document set for articles relevant to the second query (see page
140, figure 6, description);

providing articles found by the search to the user (see page 140, figure 6);

determining an importance value for a retrieved technical document via
monitoring at least one of visible technical documentation, search engine activity, and
network traffic activity (see page 140, figure 6, description, "The usefulness of these
links denoting special types of programming operations declines from left (most
relevant) to right (least relevant) and is visually reflected in the order of links and the use
of different font sizes."); and

further monitoring at least one of a counter, a type of word or phrase employed in
a search, an implied or inferred measurement of data activity and an explicit request

from users regarding a data source's technical value, ranking or merit (see page 134-142, section 2.1, "Hypadapter from the Outside").

Therefore, it would have been obvious to one of ordinary skill in the relevant art at the time the invention was made to have modified Sadahiro by the teaching of Hypadapter because Sadahiro is a tool for translating source code between programming languages and it would be useful to provide "exploratory learning and programming activities" and "personalized assistance" to "infer the user's learning progress" in a new language (see Hypadapter, Abstract) to complement the translated source code.

As to claim 23, Sadahiro teaches a computer-based information retrieval system (see Abstract), comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 33 above.

As to claim 24, Sadahiro teaches a method to facilitate automated information retrieval (see Abstract), comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 33 above.

As to claim 26, Sadahiro, as modified, teaches further comprising:

receiving a developer's request for functionally equivalent information; and

processing the request (see figure 6, step 410 and see column 14, lines 15-20).

As to claim 27, Sadahiro, as modified, teaches further comprising automatically deriving the functionally equivalent information from the second object set (see Abstract and see figure 6 and see columns 13-14).

As to claim 28, Sadahiro, as modified, teaches further comprising at least one of: receiving feedback from a developer (see Hypadapter, page 146); and generating a cross-index of familiar terms and unfamiliar terms to the developer (see Hypadapter, pages 147-148).

As to claim 29, Sadahiro, as modified, teaches the first object set further comprising at least one of a technical vocabulary object, a development vocabulary object, a synonym object, an index object, and a prioritization object (see column 4, lines 54-67).

As to claim 30, Sadahiro, as modified, teaches further comprising automatically ranking the functionally equivalent information (see page 140, figure 6, description).

As to claim 32, Sadahiro teaches a computer readable medium having a data structure stored thereon (see Abstract), the data structure comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 33 above.

As to claim 34, Sadahiro, as modified, teaches further comprising allowing users to interactively input relevancies of search results and utilizing the relevancies to perform further searches (see Hypadapter, pages 145-147, section 2.2.2, "The User Modeling Component").

Response to Arguments

9. Applicant's arguments filed on 31 October 2007 with respect to the rejected claims in view of the cited references have been fully considered but are moot in view of the new grounds for rejection.

Additional References

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of art with respect to program language learning in general:

"Metadoc: An Adaptive Hypertext Reading System" by Boyle et al. 1994.

Conclusion

11. Any inquiry concerning this communication or earlier communications should be directed to the examiner, Mark A. Radtke. The examiner's telephone number is (571) 272-7163, and the examiner can normally be reached between 9 AM and 5 PM, Monday through Friday.

If attempts to contact the examiner are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached at (571) 272-4146.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (800) 786-9199.

maxr

3 February 2008



CHRISTIAN CHACE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100